

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. - 40. (canceled).

41. (previously presented) An electron beam trajectory controlling device, comprising:

a main deflection section having a first main coil and defining a first path and being configured to control a trajectory of an electron traveling along the first path, the main deflection section including a first auxiliary coil provided proximate the first main coil, the first auxiliary coil not being electrically coupled to the first main coil; and

a minor deflection section provided adjacent to the main deflection section and having a first minor coil that is coupled to the first auxiliary coil, the minor deflection section defining a second electron path that is aligned to the first path, the minor deflection section cooperating with the main deflection section to control the trajectory of the electron,

wherein the electron beam trajectory controlling device is a deflection yoke assembly or a cathode ray tube, and the first minor coil is not coupled to the first main coil, the first auxiliary coil cooperating with the first minor coil to suppress a crosstalk voltage in the minor deflection section,

wherein the first auxiliary coil is wound around the main deflection section using a saddle-winding method.

42. (previously presented) The device of claim 41, wherein the main deflection section is a main deflection yoke and the minor deflection section is a minor deflection yoke.

43. (previously presented) The device of claim 41, further comprising:

a second main coil provided in the main deflection section, the second main coil and the first main coil together defining the first path and cooperating with each other to control the trajectory of the electron;

a second auxiliary coil provided in the main deflection section; and

a second minor coil provided in the minor deflection section and cooperating with the first minor coil to control the trajectory of the electron, the second minor coil being coupled to the second auxiliary coil,

wherein the first main coil and the first minor coil are configured to control the electron trajectory along a first direction, and where the second main coil and the second minor coil are configured to control the electron trajectory along a second direction that is orthogonal to the first direction,

wherein the first direction is an orthogonal direction to the electron trajectory and the second direction is an orthogonal direction to the electron trajectory and the first direction, the first main and minor coils being horizontal components and the second main and minor components being vertical components with respect to the electron trajectory.

44. (previously presented) The device of claim 43, further comprising:

a main core provided in the main deflection section, wherein the first and second auxiliary coils are wound around the main core; and

a minor core provided in the minor deflection section, wherein the first and second minor coils are wound toroidally around the minor core.

45. (previously presented) The device of claim 44, wherein the main core includes one or more markings to facilitate winding of at least the first auxiliary coil around the main core.

46. (previously presented) The device of claim 44, wherein a ratio of inductances of two corresponding non-main coils is between about 0.005 and about 0.7.

47. (previously presented) The device of claim 46, wherein the two corresponding non-main coils are the first auxiliary coil and the first minor coil, where L_{a1} denotes the inductance of the first auxiliary coil and L_{m1} denotes the inductance of the first minor coil, where the ratio of the inductances is $0.005 \leq L_{a1}/L_{m1} \leq 0.7$.

48. (previously presented) The device of claim 47, wherein the ratio of the inductances is $0.01 \leq L_{a1}/L_{m1} \leq 0.3$.

49. (previously presented) An electron beam trajectory controlling device, comprising:

a main deflection section having a first main coil and defining a first path and being configured to control a trajectory of an electron traveling along the first path, the main deflection section including a first auxiliary coil provided proximate the first main coil, the first auxiliary coil not being electrically coupled to the first main coil; and

a minor deflection section provided adjacent to the main deflection section and having a first minor coil that is coupled to the first auxiliary coil, the minor deflection section defining a second electron path that is aligned to the first path, the minor deflection section cooperating with the main deflection section to control the trajectory of the electron,

wherein the electron beam trajectory controlling device is a deflection yoke assembly or a cathode ray tube, and the first minor coil is not coupled to the first main coil, the first auxiliary coil cooperating with the first minor coil to suppress a crosstalk voltage in the minor deflection section,

wherein the main deflection section is provided at a location that is proximate to a fluorescent surface and the minor deflection section is provided at a location that is remote from the fluorescent surface with respect to the main deflection section.

50. (previously presented) The device of claim 49, wherein the minor deflection section is provided at a location that is proximate to an electron gun.

51. (previously presented) The device of claim 49, further comprising:

a second main coil provided in the main deflection section, the second main coil and the first main coil together defining the first path and cooperating with each other to control the trajectory of the electron;

a second auxiliary coil provided in the main deflection section; and

a second minor coil provided in the minor deflection section and cooperating with the first minor coil to control the trajectory of the electron, the second minor coil being coupled to the second auxiliary coil.

52. (previously presented) The device of claim 51, wherein the first main coil and the first minor coil are configured to control the electron trajectory along a first direction, and where the second main coil and the second minor coil are configured to control the electron trajectory along a second direction that is orthogonal to the first direction.

53. (previously presented) The device of claim 52, wherein the first direction is an orthogonal direction to the electron trajectory and the second direction is an orthogonal direction to the electron trajectory and the first direction, the first main and minor coils being horizontal components and the second main and minor components being vertical components with respect to the electron trajectory.

54. (previously presented) The device of claim 51, wherein a ratio of inductances of two corresponding non-main coils is between about 0.005 and about 0.7.

55. (previously presented) The device of claim 54, wherein the two corresponding non-main coils are the first auxiliary coil and the first minor coil, where L_{a1} denotes the inductance of the first auxiliary coil and L_{m1} denotes the inductance of the first minor coil, where the ratio of the inductances is $0.005 \leq L_{a1}/L_{m1} \leq 0.7$.

56. (previously presented) The device of claim 55, wherein the ratio of the inductances is $0.01 \leq L_{a1}/L_{m1} \leq 0.3$.

57. (previously presented) An electron beam trajectory controlling device, comprising:

a main deflection section having a first main coil and defining a first path and being configured to control a trajectory of an electron traveling along the first path, the main deflection section including a first auxiliary coil provided proximate the first main coil, the first auxiliary coil not being electrically coupled to the first main coil;

a minor deflection section provided adjacent to the main deflection section and having a first minor coil that is coupled to the first auxiliary coil, the minor deflection section defining a second electron path that is aligned to the first path, the minor deflection section cooperating with the main deflection section to control the trajectory of the electron;

a second main coil provided in the main deflection section, the second main coil and the first main coil together defining the first path and cooperating with each other to control the trajectory of the electron;

a second auxiliary coil provided in the main deflection section;

a second minor coil provided in the minor deflection section and cooperating with the first minor coil to control the trajectory of the electron, the second minor coil being coupled to the second auxiliary coil;

a main core provided in the main deflection section, wherein the first and second auxiliary coils are wound around the main core; and

a minor core provided in the minor deflection section, wherein the first and second minor coils are wound toroidally around the minor core,

wherein the first main coil and the first minor coil are configured to control the electron trajectory along a first direction, and where the second main coil and the second minor coil are configured to control the electron trajectory along a second direction that is orthogonal to the first direction,

wherein the deflection direction of the first auxiliary coil is horizontal and the first auxiliary coil is wound around the main core no more than 8 times.

58. (previously presented) The device of claim 57, wherein the first auxiliary coil is wound around the main core at least twice and no more than six times.

59. (previously presented) An electron beam trajectory controlling device, comprising:

a main deflection section having a first main coil and defining a first path and being configured to control a trajectory of an electron traveling along the first path, the main deflection section including a first auxiliary coil provided proximate the first main coil, the first auxiliary coil not being electrically coupled to the first main coil;

a minor deflection section provided adjacent to the main deflection section and having a first minor coil that is coupled to the first auxiliary coil, the minor deflection section defining a second electron path that is aligned to the first path, the minor deflection section cooperating with the main deflection section to control the trajectory of the electron;

a second main coil provided in the main deflection section, the second main coil and the first main coil together defining the first path and cooperating with each other to control the trajectory of the electron;

a second auxiliary coil provided in the main deflection section;

a second minor coil provided in the minor deflection section and cooperating with the first minor coil to control the trajectory of the electron, the second minor coil being coupled to the second auxiliary coil;

a main core provided in the main deflection section, wherein the first and second auxiliary coils are wound around the main core; and

a minor core provided in the minor deflection section, wherein the first and second minor coils are wound toroidally around the minor core,

wherein the second auxiliary coil is configured to control the electron trajectory along a vertical direction,

wherein the second auxiliary coil is wound around the main core at least 10 times and no more than 50 times.

60. (previously presented) The device of claim 59, wherein the first main coil and the first minor coil are configured to control the electron trajectory along a first direction, and where the second main coil and the second minor coil are configured to control the electron trajectory along a second direction that is orthogonal to the first direction.